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## Patent Abstracts of Japan

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APPLICANT : MITSUBISHI CHEM IND LTD;

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TITLE : PRODUCTION OF N-VINYLFORMAMIDE

ABSTRACT : PURPOSE: To obtain the titled compound in high yield, by etherifying N-( $\alpha$ -hydroxyethyl)formamide with a polyhydric alcohol, heating the ether compound under reduced pressure in a liquid phase and carrying out thermal decomposition while distilling away N-vinylformamide.

CONSTITUTION: N-( $\alpha$ -Hydroxyethyl)formamide is etherified with a polyhydric alcohol such as dihydric alcohol, etc., in the presence of a catalyst of a mineral acid such as sulfuric acid, etc., at 0-100°C for 0.5-5hr, heated in a liquid phase at  $\leq 200$ Hg reduced pressure at 90-200°C and thermal decomposition is carried out while distilling away formed N-vinylformamide, to give the aimed compound.

EFFECT: A small amount of by-products such as resin component, etc., is formed, the temperature of the thermal decomposition is lower than a conventional gaseous-phase method so this process is advantageous with respect to heat energy. There is not such problem in operation as clogging of a reaction tube with resin like a gaseous-phase method and this process is an industrially improved method.

USE: A polymerizable monomer to provide a water-soluble polymer as a flocculant.

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